



INTERMOUNTAIN POWER SERVICE CORPORATION

October 19, 2004

Mr. Richard Sprott, Director
Division of Air Quality
Department of Environmental Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820

Dear Mr. Sprott:

NOTICE OF INTENT: Intermountain Generating Station

Intermountain Power Service Corporation (IPSC) is hereby submitting a Notice of Intent (NOI) to make certain changes in operation at the Intermountain Generating Station (IGS) in Delta. The IGS is a coal fired steam-electric plant located in Millard County. Specifically, IPSC intends to add an alternate fuel source to its Unit One and Unit Two fuel portfolio. These IGS units are currently permitted to burn bituminous coal, subbituminous coal, fuel oil, used oil, and natural gas. We are proposing to utilize synthetic coal-derived fuel (synfuel) to enhance reliability and lower operating costs. This NOI requests an approval order to proceed as described herein and to make applicable Title V permit changes to operate accordingly.

As required by Utah Administrative Code R307-401-2, the following information is provided:

1. **PROCESS DESCRIPTION:** IGS is a fossil-fuel fired steam-electric generating station that primarily uses coal as fuel for the production of steam to generate electricity. Both bituminous and subbituminous coals are utilized. Fuel oil and used oil are also combusted for light off, flame stabilization and energy recovery.

IGS is a two-unit facility currently operating at a rated capacity of 950 MW per unit. Approximately 5.6 million tons of coal and 600,000 gallons of oil are used each year in the production of electricity. Boiler capacity is rated at 6.9 million pounds per hour of steam flow at 2,822 psi.

IGS has in place, bulk handling equipment for the unloading, transfer, storage, preparation, and delivery of solid and liquid fuel to the boilers. No changes of this equipment are required nor expected. No changes in the usage of other raw materials or bulk chemicals are required nor expected.

Note that process diagrams have previously been submitted, and no changes from those are proposed here.

PROPOSED CHANGES: IPSC intends to add synthetic coal-derived fuel to its existing fuel portfolio. This addition will help with long term reliability and lessen fuel related operating costs.

PRODUCTION SUMMARY: IPSC operates IGS on a 24 hour per day / 7 day per week continuous base load (full production rate) basis, up to 8,760 hours per year. Nothing in this NOI is intended to change this production aspect. IGS utilizes approximately 5.6 million tons of solid fuel annually, which can vary somewhat as coal quality changes. This consumptive pattern will not change. The solid fuel mix, however, will fluctuate as synfuel is combusted, which will displace an equal amount of coal from the fuel mix portfolio. The solid fuel mix range can extend from 100 percent coal to 100 percent synfuel.

2. **EMISSION CHARACTERISTICS:** The composition and physical characteristics of emissions resulting from the proposed change are not expected to change significantly. IPSC expects that pollutant emission rates, chimney mass flow, temperature, air contaminant types, and concentration of air contaminants will remain the same, or at most, have immeasurable changes. The current pollution control devices (PCD) include low-NO_x burners, fabric filters and wet scrubbers.
3. **PCD DESCRIPTION:** Present pollution control device equipment for combustion includes dual register low NO_x burners with over fire air, baghouse type fabric filters for particulate removal, and flue gas desulfurization scrubbers. The low NO_x burners and OFA provide a nominal 60 percent reduction in potential combustion NO_x concentration, the baghouse filters operate at nominal 99.95 percent efficiency, and the wet scrubbers operate at nominal 90 percent efficiency. Control equipment for the handling and transfer of solid material include dust collection filters.
4. **EMISSION POINT:** The present emission point for the IGS boilers is a lined chimney that discharges at 712 feet above ground level (5,386 feet above sea level). The chimney location is 39° 39' 39" longitude, 112° 34' 46" latitude.
5. **SAMPLING/MONITORING:** Emissions from boiler combustion are continuously sampled and monitored at the chimney for nitrogen oxides, sulfur oxides, carbon dioxide, and volumetric flow. Opacity is measured at the fabric filter outlet. Other parameters recorded include heat input and production level (megawatt load). Monitoring will remain unchanged. Other emissions not directly monitored are calculated using engineering judgements, emission factors, and fuel analyses.
6. **OPERATING SCHEDULE:** Operation at IGS is 24 hours per day, seven days per week.

7. **PROPOSED CHANGE DETAILS and SPECIFICATIONS:** IPSC intends to utilize synfuel as an energy source for the production of electricity. The initial consumption pattern for synfuel will be about 20 percent to 25 percent of the total solid fuel combusted at IGS Units 1 & 2. Of the 5.6 million tons of solid fuel utilized, about 1.2 million tons will be synfuel. However, if other sources of synfuel become available, synfuel could possibly represent the total solid fuel source for IGS Units 1 & 2.

Synthetic fuel, or synfuel, as described in this NOI, means coal-derived fuel that qualifies for special tax treatment under IRS Code 29. IPSC further intends it to specifically mean fuel derived only from bituminous or subbituminous coal, which will be a contractual requirement of the synfuel provider. Coal-derived synthetic fuel is coal that has been treated to change the coal in some chemically significant way. Since the current permitting for IGS allows the use of these types of coals, it removes the coal portion of synfuel as a variable in the emission characteristics. Therefore, only the chemical additive portion of the synfuel is of concern regarding how emissions may be affected.

Synfuel is made by the addition of chemical agents to a coal base. In the type of synfuel to be used at IGS, this additive is a latex-based proprietary emulsion applied to the coal and mixed at the coal source. This additive is similar in makeup to products already utilized at IGS for dust control (such as sealing the coal pile) as required by our UDAQ approved fugitive dust management plan. The rate of chemical addition will be 2 pounds per ton of coal, which could utilize up to 5,600 tons per year of the chemical additive.

A full description of this product, identified as Covol 298-1, is enclosed. The product information includes a Material Safety Data Sheet that generally describes the product, as well as a trace analysis comparing base coal to the coal-derived synfuel. IPSC is also submitting a copy of testing performed by N.S. Harding & Associates that indicate no significant emission changes when this product is used. This latex product differs somewhat from other synfuels that utilize asphalt or tar-based binders which have been reviewed by the EPA and other State DEQ's, whose evaluations and conclusions on those synfuels also indicate no significant changes in emissions. An in-depth mathematical emissions analysis is futile in that the change to coal from the addition of the proposed binder is so insignificant that it would be buried in the variability of naturally occurring coal quality.

8. **ADDITIONAL INFORMATION:** IGS operates under a Title V permit (#2700010002). IPSC intends to continue to operate in full compliance with that permit and applicable requirements. No deviations from permit conditions are expected with this change.

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Applicability Determinations

IGS currently utilizes bituminous and subbituminous coals in its fuel portfolio. Products similar to COVOL 298-1 are used for dust control, which are added to and combusted with the coal. The make-up of the additive is such that it, by itself, has high heating value and fuel characteristics which would cause the additive to be completely consumed except for a small ash portion (about 1 percent). Furnace temperatures would ensure full destruction of the additive portion of the synfuel, which illustrates why emissions, either in pounds per hour or tons per year, would not significantly change.

New Source Performance Standards. IGS operates as a New Source Performance Standard (NSPS) power plant, regulated under Title 40 of the Code of Federal Regulations, Part 60, Subpart Da. The proposed changes do not trigger NSPS applicability. "Modification" is defined at 40 CFR 60.14 to include any change in operation of a source that increases the maximum hourly emissions of a Part 60 regulated pollutant above the maximum achievable during the previous five years. (See 40 CFR 60.14(h)).

Prevention of Significant Deterioration. IGS was constructed and has been previously modified under Prevention of Significant Deterioration (PSD) permits, and none of the changes proposed herein are a major modification for PSD purposes. In fact, since the products and coals involved in the makeup of synfuel are similar to those already utilized at IGS, the use of synfuel should not technically be considered a modification in operation outside of the semantics required for the Internal Revenue Service.

Best Available Control Technology (BACT). IGS was constructed and has been previously modified under PSD permits which required BACT. Since none of the changes described in this NOI are a major modification for PSD purposes, the existing BACT at IGS is still the required level of pollution control.

Potential-to-Emit. The PTE for IGS Units 1 & 2 would not change because the heating input required for full load operation can be provided in equal substitution by synfuel, which has no significant change on emission characteristics.

Should you require further information to expedite the approval of this request, please contact Mr. Dennis Killian, Superintendent of Technical Services, at (435) 864-4414, or by e-mail to dennis-k@ipsc.com.

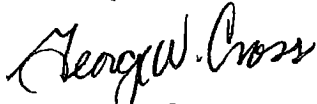
Title V Permit and Approval Order

The changes proposed herein will affect only one condition of the current approval order and Title V permit. Specifically, Condition 17 in AO # DAQE-AN0327009-04 and descriptions II.A.1 and II.A.2 of Special Provisions II.A. of Title V permit #2700010002 should be modified to include synfuel.

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Inasmuch as this notice of intent may affect our Title V Operating Permit, I hereby certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Cordially,



George W. Cross
President, Chief Operations Officer, and Title V Responsible Official



BP/RJC:jmj
Enclosure

cc: Blaine Ipson, IPSC
Bruce Moore, LADWP CES
James Holtkamp, LLG&M

Lynn Banks, IPSC
Eric Tharp, LADWP



Effective Date: 1/31/2003 MATERIAL SAFETY DATA SHEET MSDS No: DRS10005
Material Description: COVOL 298-1 Material Code: 150956

1. Chemical Product and Company Identification

Material Description: COVOL 298-1

Material Code: 150956

Manufacturer Name:

Dow Reichhold Specialty Latex LLC
P.O. Box 13906
Research Triangle Park, NC 27709
United States

NFPA

Health:	1
Flammability:	0
Reactivity:	0

Emergency Phone Number - 24 Hour: (800) 424-9300
To Request Additional Information: (800) 451-9562

HMIS

Health:	1
Flammability:	0
Reactivity:	0

Chemical Family: Carboxylated Styrene Butadiene/Vinyl Acrylic Polymer

2. Composition, Information on Ingredients

CAS No.	CHEMICAL IDENTITY	% BY WT
Proprietary	Carboxylated Styrene Butadiene/Vinyl Acrylic Polymer	45 -55
7732-18-5	Water	45 - 55

3. Hazards Identification

Emergency Overview

No significant immediate hazards for emergency response are known. Milky white liquid emulsion. Slight ammonia odor. Vapors may irritate eyes, nose, throat, and skin. Dike and contain spill. Avoid dilution of spills.

Potential Health Effects

EYES: Direct contact with this material may cause eye irritation including tearing and redness. Corneal injury is unlikely.

SKIN: Short single exposure not likely to cause significant skin irritation. Prolonged and repeated exposure may cause slight skin irritation. Material may stick to skin causing irritation upon removal. A single, prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION: Inhalation of vapor may cause irritation to the respiratory tract (nose, throat, and lungs). With good ventilation, a single exposure to vapors is not expected to cause adverse effects.

Systemic Effects (Other Target Organs) No relevant information found.

4. First Aid Measures

Eye Contact

Immediately flush eyes with large quantities of clean water for at least 15 minutes. Consult a physician.

Skin Contact

Wash skin with soap and water. Remove contaminated clothing. Seek medical attention if irritation develops. Wash contaminated clothing before reuse.

Inhalation

Remove affected individual(s) to fresh air. Seek medical attention if breathing difficulty develops.

Ingestion

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Notes to Physician

No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient.

5. Fire Fighting Measures

Properties

Flash Point: Not applicable.

Method Used: Not applicable.

Autoignition Temperature: Not applicable.

Flammable Limits in Air (Lower): Not applicable.

Flammable Limits in Air (Upper): Not applicable.

Fire Fighting Extinguishing Media

To extinguish combustible residues of this product, use water fog, carbon dioxide, dry chemical or foam.

Fire Fighting Equipment

Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Fire Fighting Instructions

Keep people away. Isolate fire area and deny unnecessary entry. Containers of this material may build up pressure if exposed to heat (fire). Use a water spray to cool fire-exposed containers.

Fire / Explosion Hazards

This material will not burn unless it is evaporated to dryness.

Hazardous Combustion Products

Under fire conditions, some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to hydrocarbons, carbon monoxide and dense smoke.

6. Accidental Release Measures

Personal Precautions

Avoid unnecessary exposure and contact. Barricade the area to restrict access. Persons not wearing protective equipment (see Section 8) should be excluded from the area of the spill until clean-up has been completed.

Environmental Precautions

Stop leak at source when it is safe to do so. Dike and contain spill. Prevent spilled material from contaminating soil or entering drains, sewers, streams or other bodies of water.

Cleanup Procedures

Avoid dilution with water to minimize the extent of the spill. Recover and recycle spilled latex if possible, otherwise, collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

7. Handling and Storage

Handling Information

Practice reasonable care to avoid repeated, prolonged skin contact. An eye wash station and a safety shower should be readily accessible to workers wherever this material is stored or used.

Storage Information

Keep from freezing. Store at temperatures between 40° F and 110° F. Material may develop bacteria odor on long-term storage. No safety problems known.

8. Exposure Controls, Personal Protection

Exposure Limits Guidelines

There are no exposure limits assigned to the polymer in this product by the Occupational Safety and Health Administration (OSHA) or American Conference of Governmental Industrial Hygienists (ACGIH).

Engineering Controls

Good general ventilation should be sufficient to control airborne levels of irritating vapors.

Personal Protective Equipment

EYES: Wear safety glasses with side shields or goggles.

SKIN: Wear clean, long-sleeved, body-covering clothing. Nitrile, neoprene®, or rubber gloves should provide protection against skin contact.

INHALATION: For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, or areas are poorly ventilated, use an approved air-purifying respirator.

Personal Protective Equipment

9. Physical and Chemical Properties

Physical Properties

Appearance – (Color, Physical Form, Shape): Milky white liquid emulsion.

Odor: Slight ammonia odor.

Physical State: Liquid.

pH: 4.0 - 9.0

Vapor Pressure: 17.5 mm Hg @ 68° F (20° C)

Vapor Density: 0.624 @ 80° F (26.7° C)

Boiling Point: 212° F (100° C)

Freezing Point: 32° F (0° C)

Solubility: Product as sold is dilutable. Polymer component is insoluble.

Specific Gravity: 1.00 - 1.08

Additional Information

The physical data listed are for a series of latexes. For specific properties on any given latex, see the product bulletin.

10. Stability and Reactivity

Stability

This material is stable during storage and during its intended use.

Incompatible Materials/Substances

Addition of chemicals, such as acids or multivalent metal salts, may cause coagulation.

Conditions to Avoid

Avoid freezing temperatures (less than 32° F or 0° C). Product can decompose at elevated temperatures.

Hazardous Decomposition Products

Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Thermal decomposition may produce various hydrocarbons and irritating, acrid vapors.

Hazardous Polymerization

Hazardous polymerization will not occur.

11. Toxicological Information

Acute Toxicity (Humans)

Refer to Section 3 for available information on potential health effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1

SKIN: Based on properties of similar polymers, the polymer is not hazardous.

INGESTION: Based on properties of similar polymers, the polymer is not hazardous.

INHALATION: Based on properties of similar polymers, the polymer is not hazardous.

12. Ecological Information

Movement & Partitioning

Latex dispersions will color water a milky white. No bioconcentration of the polymeric component is expected because of its high molecular weight.

Degradation & Persistence

The polymeric component is not expected to biodegrade.

Ecotoxicity

Based largely or completely on information for similar material(s): Material is practically non-toxic to aquatic organisms on an acute basis (LC50 or EC50 >100 mg/L in the most sensitive species tested).

13. Disposal Considerations

Disposal Method

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

NOT A RCRA HAZARDOUS WASTE: When discarded in its purchased form, this material would not be regulated as a RCRA Hazardous waste under 40 CFR 261.

14. Transportation Information

Department of Transportation (DOT) - US

This product is not regulated by D.O.T. when shipped domestically by land.

Transportation of Dangerous Goods (TDG) - Canada

This product is not regulated by TDG when shipped domestically by land.

15. Regulatory Information

U.S. Federal Regulations

Occupational Safety and Health Act (OSHA): This material is not classified as hazardous under the criteria of the US Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 8(b) - Inventory Status: All components of this material are listed on or are exempt from the US Toxic Substances Control Act (TSCA) inventory.

SARA Title III Section 313 Toxic Chemical List (TCL): To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA Hazard Category: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

- Not to have met any hazard category.

Workplace Hazardous Materials Information System (WHMIS) - Canada

Workplace Hazardous Materials Information System (WHMIS) - Canada: This material is not classified as a controlled product under the Canadian Workplace Hazardous Material Information System.

Canadian Inventory Status: All components of this material are listed on the Canadian Domestic Substances List (DSL).

Additional Information

California Proposition 65: This material contains chemicals known to the State of California to cause cancer.

- Acetaldehyde
- 4-Vinylcyclohexene

16. Other Information

Addtional Information

Disclaimer: This information is provided in good faith and is correct to the best knowledge of Dow Reichhold Specialty Latex LLC as of the date hereof and is designed to assist our customers; however, Dow Reichhold Specialty Latex LLC makes no representation as to its completeness or accuracy. Our

products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy as to suitability for their specific applications. Any use which Dow Reichhold Specialty Latex LLC customers or third parties make of this information, or any reliance on, or decisions made based upon it, are the responsibility of such customer or third party. Dow Reichhold Specialty Latex LLC disclaims responsibility for damages, or liability, of any kind resulting from the use of this information. THERE ARE NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT IT DESCRIBES. IN NO EVENT SHALL DOW REICHOLD SPECIALTY LATEX LLC BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

Covol Fuels Synfuel Binders
Manufactured by Dow Reichhold Specialty Latex LLC

Proximate and Ultimate Analyses

<u>Proximate Analysis*</u>	Covol 298	Covol 298-1		
	<u>Result</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>
Moisture	50.9	47.9	wt. %	0.1
Ash	0.69	0.73	wt. %	0.01
Volatile Matter	21.78	21.82	wt. %	0.1
Fixed Carbon	77.5	77.5	wt. %	0.1
Heating Value	17,616	14,116	BTU/lb.	325

<u>Ultimate Analysis*</u>	Covol 298	Covol 298-1		
	<u>Result</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>
Carbon	87.40	72.04	wt. %	0.2
Hydrogen	9.04	8.47	wt. %	0.2
Nitrogen	0.51	0.29	wt. %	0.2
Sulfur	0.19	0.11	wt. %	0.01
Oxygen	2.2	18.4	wt. %	0.2

* Moisture was run on the as-received sample. All other parameters were run on a dry basis.

Covol Fuels Synfuel Binders
Manufactured by Dow Reichhold Specialty Latex LLC

Elemental Analysis

<u>Elemental Analysis</u>	<u>Covol 298</u>	<u>Covol 298-1</u>	<u>Units</u>	<u>MRL</u>
	<u>Result</u>	<u>Result</u>		
Aluminum	<1	<1	mg/kg	0.023
Antimony	<0.01	<0.01	mg/kg	0.032
Arsenic	<0.1	<0.1	mg/kg	0.017
Barium	<1	<1	mg/kg	0.0013
Beryllium	<0.01	<0.01	mg/kg	0.00027
Bromide	<0.01	<0.01	wt. %	0.01
Cadmium	<0.01	<0.01	mg/kg	0.0025
Calcium	<1	<1	mg/kg	0.00019
Chlorine, total	<0.005	<0.005	wt. %	0.001
Chromium	<1	<1	mg/kg	0.0061
Cobalt	<0.1	<0.1	mg/kg	0.0060
Copper	<0.1	<0.1	mg/kg	0.0054
Fluorine, total	<0.007	<0.007	wt. %	0.007
Iodide	<0.004	<0.004	wt. %	0.004
Iron	<1	<1	mg/kg	0.0046
Lead	<0.1	<0.1	mg/kg	0.044
Lithium	<1	<1	mg/kg	0.002
Magnesium	<1	<1	mg/kg	0.00015
Manganese	<1	<1	mg/kg	0.0014
Mercury	<0.01	<0.01	mg/kg	0.025
Molybdenum	<0.1	<0.1	mg/kg	0.0079
Nickel	<0.1	<0.01	mg/kg	0.010
Potassium	<1	<1	mg/kg	0.7
Selenium	<0.1	<0.1	mg/kg	0.075
Silver	<0.01	<0.01	mg/kg	0.007
Strontium	<1	<1	mg/kg	0.00042
Thallium	<0.01	<0.01	mg/kg	0.040
Titanium	<1	<1	mg/kg	0.0038
Vanadium	<1	<1	mg/kg	0.0050
Zinc	<1	<1	mg/kg	0.0018